

**ABSTRACT**

A high-speed switching system and method are presented, wherein an  $n$ -to-1 switch is configured to receive  $n$  data inputs, choose a single data output from the received  $n$  data inputs, and output the chosen data output. In a preferred embodiment, the system is

5 configured as a modular system having multiple 2-to-1 switches that are cascaded together in binary-tree fashion, thereby allowing for a simpler implementation over a wide range of  $n$ . The system and method also provide an approach for providing a data valid signal, which indicates whether or not the chosen data output is expected.